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Sheet	1	of	1	Attorney Docket Number	416272004600	l

U.S. PATENT DOCUMENTS						
Examiner	Cite	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where	
Initials*	No.1	Number-Kind Code ² (# known) MM-DD-YY		Applicant of Cited Document	Relevant Passages or Relevant Figures Appear	
/CC/	1.	US-4,003,156	01-18-1977	Sibi et al.		
/00	2.	US-6,162,900	12-19-2000	Guerinot et al.		
/CC	/3 .	US-6,235,529-B1	05-22-2001	Lemaux et al.		

FOREIGN PATENT DOCUMENTS									
Examiner Initials*	Cite	Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines,				
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		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	4.	ABBAS, M. A. et al. (1993) "Growth and Some Metabolic Activities of	
/CC	V	Maize Plants in Response to Copper Pollution," Journal of	
		Environmental Sciences 6:145-158	
	5.	DONCHEVA, S. et al. (1996) "Effect of Copper Excess on the	
		Morphology of the Nucleus in Maize Root Meristem Cells," Physiologia	
/CC/		Plantarum 96:118-122	
	6.	DONCHEVA, Snejana (1997) "Ultrastructural Localization of Ag-NOR	
/CC/		Proteins in Root Meristem Cells After Copper Treatment," J. Plant	
1001		Physiol. 151:242-245	
	7.	ZHANG, S. et al. (1999) "Genetic Transformation of Commercial	
/CC/		Cultivars of Oat (Avena sativa L.) and Barley (Hordeum vulgare L.)	1
,00,		Using in Vitro Shoot Meristematic Cultures Derived from Germinated	l
		Seedlings," Plant Cell Reports 18:959-966	<u> </u>
1001	8.	ZHANG, S. et al. (2002) "Transformation of Recalcitrant Maize Elite	
/CC/		Inbreds Using in Vitro Shoot Meristematic Cultures Induced from	
		Germinated Seedlings," Plant. Cell Rep. 21:263-270	<u> </u>
100	9.	Int'l Search report, dated May 17, 2004, Int'l Appln. No.	
/00/		PCT/US2003/027565	L

*EXAMINER: Initial if information considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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	U.S. PATENT DOCUMENTS							
Examine Initiats*	Cite No.	Document Number Number-Kind Code ² (# known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear			
/CC	/ 1.	US-4,699,644	10-13-1987	Brandt et al.				
	2.	US-5,164,310	11-17-1992	Smith et al.				
	3.	US-5,281,529	01-25-1994	Zhong et al.	·			
	4.	US-5,320,961	06-14-1994	Zhong et al.				
	5.	US-5,350,688	09-27-1994	Matsuno et al.				
	6.	US-5,403,736	04-04-1995	Tanimoto				
	7.	US-5,405,765	04-11-1995	Vasil et al.				
	8.	US-5,480,789	01-02-1996	Firoozabady et al.				
	9.	US-5,565,355	10-15-1996	Smith				
	10.	US-5,589,617	12-31-1996	Nehra et al.				
	11.	US-5,610,042	03-11-1997	Chang et al.				
	12.	US-5,639,949	06-17-1997	Ligon et al.				
	13.	US-5,641,664	06-24-1997	D'Halluin et al.				
	14.	US-5,736,369	04-07-1998	Bowen et al.				
	15.	US-5,948,956	09-07-1999	Lee et al.				
	16.	US-6,140,555	10-31-2000	Reichert et al.				
	17.	US-6,486,384	11-26-2002	Zhang et al.				
W	18.	US-6,541,257-A1	04-01-2003	Lemaux et al.				

	FOREIGN PATENT DOCUMENTS								
Examine		Cito	Foreign Patent Document	. Publication	Name of Patentee or	Pages, Columns, Lines,			
Initials*	"	Cite No. ¹	Country Code ³ -Number ⁴ -Kind Code ⁵ (if Innown)	Date MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	┲		
/CC	<i>// :</i>	19.	EP-0558676	09-08-1993					
	1	20.	JP-01027466	01-30-1989					
	1	21.	JP-07213183	08-15-1995					
	1	22.	JP-07255304	10-09-1995					
П		23.	WO-92/20809	11-26-1992					
		24.	WO-94/13822	06-23-1994					
	, ;	25.	WO-96/04392	02-15-1996					
$oxed{\Psi}$		26.	WO-97/17429	05-15-1997					

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NON PATENT LITERATURE DOCUMENTS						
Examiner Initials	ls No. 1 magazine, journal, senal, symposium, catalog, etc.), date, page(s), volume-issue number(s), publis and/or country where published.		T ²			
/CC/		ALI, Gayoor et al. (1999) "Morphogenic and Biochemical Responses of Bacopa Monniera Cultrues to Zinc Toxicity," Plant Science, 143: 187-193				
	28.	BAILLIE et al., 1992, "Field evaluation of barley (Hordeum vulgare L.) genetypes derived from tissue culture," Can. J. Plant Sci., 72:725-733.				
	29.	BHASKARAN et al., 1990, "Regeneration in Cereal Tissue Culture: A Review," Crop Sci., 30:1328-1337.				
	30.	BHOJWANI, S. S. et al. (1983) Chapter 3 In Plant Tissue Culture: Theory and Practice, Elsevier, Amsterdam, pages 25-41				
	31.	BREGITZER et al, 1995, "Plant regeneration from Barley Callus: Effects of 2, 4-dichlorophenoxyacetic acid and phynylacetic acid," Plant Cell Tiss. Org. Cult., 43:229-235.				
	32.	BREGITZER et al. (1998) "Enhancement of Plant Regeneration from Embryogenic Callus of Commercial Barley Cultivars," Plant Cell Reports 17(12): 941-945.				
	33.	BREGITZER, 1992, "Plant Regeneration and Callus Type in Barley: Effects of Genetype and Culture Medium," Crop Sci., 32:1108-1112.				
	34.	CASAS et al. (1997) "Transgenic Sorghum Plants Obtained after Microprojectile Bombardment of Immature Inflorescences," In Vitro Cell. Dev. Biol Plant 33: 92-100				
	35.	CHRISTENSEN et al., 1996, "Ubiquitin promoter-based vectors for high-level expression of selectable and/or screenable marker genes in monocotyledonous plants," Transgenic Res., 5:1-6.				
	36.	DAHLEEN, 1995, "Improved plant regeneration from barley callus cultures by increased copper levels," Plant Cell Tiss. Org. Cult., 43:267-269.				
	37.	DAHLEEN, Lynn S. (July 1996) Public message posted on Plant-tc Bulletin Board located at http://plant-tc.coafes.umn.edu/listserv/1996/log9607/msg00093.html				
	38.	DE BLOCK et al., 1987, "Engineering herbicide resistance in plants by expression of a detoxifying enzyme," EMBO J., 6:2513-2518.				
	39.	FLETCHER, (1969) "Retardation of Leaf Senescence by Benzyladenine in Intact Bean Plants," Planta, 89:1-8.				
	40.	FROMM et al., (1986) "Stable transformation of maize after gene transfer by electroporation," Nature, 319:791-793.				
V	41.	FROMM et al., (1989) "An Octopine Synthase Enhancer Element				

Examiner Signature	/Cynthia Collins/	Date Considered	09/14/2007
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Substitute for form 1449/PTO				Complete If Known		
				Application Number	10/526,663	
11	VFORMATION	N DIS	SCLOSURE	Filing Date	September 3, 2003	
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Sheet	3	of	5	Attorney Docket Number	416272004600	

		Directs Tissue-Specific Expression and Binds ASF-1, a Factor from			
		Tobacco Nuclear Extracts," Plant Cell, 1:977-984.			
/CC	42.	FUNATSUKI et al., (1995) "Fertile transgenic barley generated by direct DNA transfer to protoplasts," Theor. Appl. Genet., 91:707-712.			
	43. GHAEMI et al., (1994) "The effects of silver nitrate, colchicines, cur sulfate and genotype on the production of embryoids from anthers tetraploid wheat (Triticum turgidum)," Plant Cell Tiss. Org. Cult.,				
		36:355-359.	1		
	44.	GLESS et al. (1998), "Transgenic Oat Plants Obtained at High Efficiency by Microprojectile Bombardment of Leaf Base Segments," J. Plant Physiol., 152:151-157.			
:	45.	GOLDSTEIN et al., (1986) "Tissue culture and plant regeneration from immature embryo explants of Barley, Hordeum vulgare," Theor, Appl. Genet., 71:631-636.			
	46.	GORDON-KAMM et al., (1990) "Transformation of Maize Cells and Regeneration of Fertile Transgenic Plants," Plant Cell, 2:603-618.			
	47.	GRIFFIN et al., (1995) "High-frequency plant regeneration from seed-derived callus cultures of Kentucky bluegrass (Poa pratensis L.)," Plant Cell Rep., 14:721-724.			
	48.	HAGIO et al., (1995) "Production of fertile transgenic barley (Hordeum vulgare L.) plant using the hygromycin-resis-tance marker," Plant Cell Rep., 14:329-334.			
	49.	HANZEL et al., (1985) "Genotype and Media Effects on Callus Formation and Regeneration in Barley," Crop Sci., 25:27-31.			
	50.	HOLM et al., (1994) "Regeneration of fertile barley plants from mechanically isolated protoplasts of the fertilized egg cell," Plant Cell, 6:531-543			
	51.	HOLTORF et al., (1995) "Two routes of chlorophyllide synthesis that are differentially regulated by light in barley (Hordeum vulgare L.)," Proc. Natl. Acad. Sci. USA, 92:3254-3258.			
	52.	HOSSAIN, B. et al. (1997) "Internal Zinc Accumulation is Correlated with Increased Growth in Rice Suspension Culture," J Plant Growth Regul, 16: 239-243			
	53.	JAHNE et al., (1991) "Regeneration of fertile plants from protoplasts derived from embryogenic cell suspensions of barley (Hordeum vulgare L.), " Plant Cell Rep., 10:1-6.			
	54.	JAHNE et al., (1994) "Regeneration of transgenic, microspore-derived, fertile barley," Theor. Appl Genet., 89:525-533.			
$ldsymbol{f L} oldsymbol{f V}$	55.	JAHNE, A. et al. (1991) "Plant Regeneration from Embryonic Cell	<u> </u>		

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Sheet	4	of	5	Attorney Docket Number	416272004600	

/CC/		Suspensions Derived from Anther Cultures of Barley (Hordeum				
		Vulgare L.)," Theor Appl Genet, 82: 74-80				
	56.	JAIN et al., (1995), "An improved procedure for plant regeneration from indica and japonica rice protoplasts," Plant Cell Reports, 14:515-519				
	57.	KASHA et al., (1991) "Haploids in Cereal Improvement: Anther and Microspore Culture," In: Gene Manipulation in Plant Improvement II, Gustafson (ed.), Plenum Press: New York, pp. 213-235.				
58.		KOTT et al., (1984) "Initiation and morphological development of somatic embryoids from barley cell cultures," Can. J. Bot., 62:1245-1249.				
	59.	LEMAUX et al., (1996) "Bombardment-Mediated Transformation Methods for Barley," Bio-Rad US/EG Bulletin 2007: 1-6				
	60.	LUHRS et al., (1987) "Plant regeneration in vitro from embryo-genic cultures of spring- and winter-type barley (Hordeum vulgare L.) varieties," Theor. Appl. Genet., 75:16-25.				
	61.	LUTHRA, Rajesh et al. (1997) "Microprojectile Mediated Plant Transformation: A Bibliographic Search," Euphytica 95: 269-294				
	62.	MURAKAMI et al., (1986) "The bialaphos biosynthetic genes of Streptomyces hygroscopicus: Molecular cloning and char-acterization of the gene cluster," Mol. Gen. Genet., 205:42-50.				
	63.	NAPOLI et al. (1990), "Introduction of a Chimeric Chalcone Synthase Gene into Petunia Results in Reversible Co-Suppression of Homlogous Genes in trans," The Plant Cell, 2:279-289.				
	64.	ORTIZ, Pablo A. et al. (1996) "Hygromycin Resistance as an Efficient Selectable Marker for Wheat Stable Transformation," Plant Cell Reports 15: 877-881	-			
	65.	PASTERNAK, Taras P. et al. (1999) "Embryogenic Callus Formation and Plant Regeneration from Leaf Base Segments of Barley (Hordeum vulgare L.)," J Plant Physiol, 155: 371-375				
	66.	POTRYKUS (1991), "Gene Transfer to Plants: Assessment of Published Approaches and Results," Annu. Rev. Plant Physiol. Plant Mol. Biol., 42:205-225.				
	67.	PURNHAUSER (1991) "Stimulation of Shoot and Root Regeneration in Wheat Triticum Aestivum Callus Cultures by Copper," Cereal Research Communications, 19: 419-424.				
\bigvee	68.	SALMENKALLIO-MARTTILA et al., (1995) "Transgenic barley (Hor-deum vulgare L) by electroporation of protoplasts," Plant Cell Rep., 15:301-304.				

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	(Use as many sheets as necessary)			Examiner Name	Not Yet Assigned	
Sheet	5	of	5	Attorney Docket Number	416272004600	

10	CC/	69.	SOMERS et al. (1992), "Fertile, Transgenic Oat Plants," Biotechnology, 10:1589-1594.				
	70.		THOMPSON et al., (1987) "Characterization of the herbicide-r-esistance gene bar from Streptomyces hygroscopicus," EMBO J., 6:2519-2523.				
		71.	TORBERT et al. (1995), "Use of paromomycin as a selective agent for oat transformation," Plant Cell Reports, 14:635-640.				
		72.	VAIN et al. (1993) "Osmotic Treatment Enhances Particle Bombardment-Mediated Transient and Stable Transformation of Maize," Plant Cell Reports, 12: 84-88				
		73.	WAN et al. (1995), "Type I callus as a bombardment target for generating fertile transgenic maize (Zea mays L.)," Planta, 196:7-14.				
		74.	WAN et al., (1994) "Biolistic Transformation of MicrosporeDerived and Immature Zygotic Embryos and Regeneration of Fertile Transgenic Barley Plants," In: Gene Transfer to Plants, eds. Potrykus and Spangenberg, Springer Verlag, pp. 139-146.				
		75.	WAN, Yuechun et al. (1994) "Generation of Large Numbers of Independently Transformed Fertile Barley Plants," Plant Physiology, 104: 37-48				
		76.	ZAGHMOUT et al. (1992), "Plant Regeneration from Callus and Protoplasts of Perennial Ryegrass (Lolium perenne L.)," J. Plant Physiol., 140:101-105.				
		77.	ZHANG et al., (1996) "Production of Multiple Shoots Apical Meristems of Oat (Avena sativa L.)," J. Plant Physiol, 148:667-671.				
•	•	78.	ZHANG, S. et al. (1998) "Expression of CDC2Zm and KNOTTED1 During In-Vitro Axillary Shoot Meristem Proliferation and Adventitious Shoot Meristem Formation in Maize (Zea mays L.) and Barley (Hordeum vulgare L.)," Planta, 204: 542-549				
		79.	ZHONG et al. (1996), "The Competence of Maize Shoot Meristems for Integrative Transformation and Inherited Expression of Transgenes," Plant Physiol., 110:1097-1107.				
		80.	ZHONG et al., (1991) "Plant regeneration via somatic embryo-genesis in creeping bentgrass (Agrostis palustris Huds.)," Plant Cell Rep., 10:453-456.				
1	V	81.	ZHONG et al., (1992) "In-vitro morphogenesis of corn (Zea mays L.)," Planta, 187:483-489.				

^{*}EXAMINER: thitial if information considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

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